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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/829,189

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Yoshikazu Hayashi

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09/16/2009

WENDEROTH, LIND & PONACK L.L.P.

1030 15th Street, N.W.

Suite 400 East

Washington, DC 20005-1503

EXAMINER

IDOWU, OLUGBENGA O

ART UNIT

PAPER NUMBER

2425

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,189	<b>Applicant(s)</b> HAYASHI, YOSHIKAZU	
	<b>Examiner</b> OLUGBENGA O. IDOWU	<b>Art Unit</b> 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 14 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 5/15/2009, with respect to the rejection(s) of claim(s) 1 – 7 and 14 – 20 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lecrom, Tsurumi and Dinwiddie.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 7 and 14 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lecrom, publication number: US 2005 0144646 in view of Tsurumi, patent number US 6 714 262 in further view of Dinwiddie, patent number: US 7 568 208.

As per claims 1 and 14, Lecrom teaches a broadcasting signal receiver apparatus comprising:

a security device for storing security information on a broadcasting entity, and for extracting SI (Service Information) information for receiving a broadcasting signal modulated in a predetermined modulation mode from a control signal transmitted from

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an apparatus of the broadcasting entity (smart card [0114], [0116], Fig. 4, 2052, 2062),  
and

a receiver for receiving the broadcasting signal transmitted from the apparatus of the broadcasting entity based on extracted transmission information (Receiver, Fig. 4, [0109, 0114],

wherein said security device is separated from said receiver, and can be mounted in said receiver (removable smart card, [0114], [0116], Fig. 4, 2052, 2062), and  
wherein said receiver comprises:

a first tuner for controlling a frequency of the received broadcasting signal to select a channel of a predetermined broadcasting signal (Tuner, 2016, [0139]);

a first demodulator capable of demodulating the broadcasting signal transmitted from the apparatus of the broadcasting entity in a plurality of demodulation modes corresponding to modulation modes of modulation systems of the broadcasting signal, said first demodulator demodulating the broadcasting signal of the channel selected by said first tuner in a demodulation mode which is set among the plurality of demodulation modes (demodulator 2012, [0139]);

a first controller for controlling the demodulation mode of said first demodulator (processor 2002, [0138], [0142]);

a second tuner for controlling a frequency of the received broadcasting signal to select a channel of a predetermined control signal (second tuner, 2018, [0139]);

a second demodulator for demodulating the control signal of the channel selected by said second tuner and outputting FDC (Forward Data Channel) data(second demodulator, 2014, [0139], [0115], [0132]);

a second controller for:

when said security device is mounted in said receiver, (1) extracting transmission information from the SI information extracted by said security device, the SI information being transmitted with the FDC data, and (2) receiving the broadcasting signal based on the extracted transmission information (Descrambling based on presence of smart card and receiving stream based on extracted data, [0132], controller being interpreted as co-processor 2004, Fig. 4, extracting information [0260], ); and

Lecrom does not teach a synchronization judgment unit for judging whether or not said first demodulator is synchronized with the received broadcasting signal, and for outputting a synchronization judgment result signal;

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a device detector for detecting whether or not said security device is mounted in said receiver; and

When it is detected by the device detector that said security device is not mounted in said receiver, controlling the system to receive the streams based on other criteria

In an analogous art, Tsurumi teaches a synchronization judgment unit for judging whether or not said first demodulator is synchronized with the received broadcasting signal, and for outputting a synchronization judgment result signal (col. 6, lines 35 - 43); Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lecrom's receiving system by including a synchronization judgment unit as taught by Tsurumi for the advantage of presetting all receivable channels in a short time.

The combination of Lecrom and Tsurumi do not teach a device detector for detecting whether or not said security device is mounted in said receiver; and

When it is detected by the device detector that said security device is not mounted in said receiver, controlling the system to receive the streams based on other criteria

In an analogous art, Dinwiddie teaches a device detector for detecting whether or not said security device is mounted in said receiver; and

When it is detected by the device detector that said security device is not mounted in said receiver, controlling the system to receive the streams based on other criteria

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(checking if security device is mounted and determining reception mode based on result, col. 4, lines 12 - 46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Lecrom and Tsurumi's receiving system by including a system that checks for the presence of the a smart card as described in Dinwiddie's television system for the advantages of allowing the system a level of functionality even when the smart card is not present.

As per claims 2 and 15, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein said second controller initializes a demodulation mode control processing executed by said first controller immediately after the frequency of said fast tuner is changed (Lecrom: [0275 - 0281]).

As per claims 3 and 16, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein said first controller controls at least one of a modulation rate, filter coefficients (Lecrom: CPU 2002, [0138], [0142]), and a constellation which are set to said first demodulator based on the synchronization judgment result signal from said synchronization judgment unit until said first demodulator is synchronized with the received broadcasting signal (Tsurumi: col. 6, lines 35 - 43).

As per claims 4 and 17, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein said first demodulator comprises a carrier recovery circuit which reproduces a

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carrier wave of the received broadcasting signal (Tsurumi: Fig. 2, 24, col. 5, lines 21 – 65, col. 6), and

wherein said synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on a phase error era demodulated signal reproduced by said carrier recovery circuit (Tsurumi: Col. 5, lines 52 - 65, col. 6, lines 1 - 42).

As per claims 5 and 18, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein said first demodulator comprises a clock recovery circuit which reproduces a clock signal of the received broadcasting signal (Tsurumi: Fig. 2, 23, col. 5, lines 21 – 65, col. 6), and

wherein said .synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on a phase error of the clock signal reproduced by said clock signal recovery circuit (Tsurumi: Col. 5, lines 52 - 65, col. 6, lines 1 - 42).

As per claims 6 and 19, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein said first demodulator comprises an error correction circuit which corrects an error of the received broadcasting signal (Tsurumi: Fig. 3, 26, col. 5, lines 21 – 65, col. 6), and

wherein said synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on whether or not a frame



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synchronous signal outputted from said error correction circuit can be detected

(Tsurumi: col. 6, lines 9 – 65, col. 9, lines 30 - 35).

As per claims 7 and 20, the combination of Lecrom, Tsurumi and Dinwiddie teach wherein each of said first controller unit is constituted by a hardware circuit (Lecrom: CPU 2002, [0138], [0142])

Tsurumi discloses said synchronization judgment unit is constituted by a hardware circuit (col. 6, lines 35 - 43 and Fig 3, 2 and 29)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUGBENGA O. IDOWU whose telephone number is (571)270-1450. The examiner can normally be reached on Monday to Friday, 7am - 5pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendelton can be reached on 571 272 7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Olugbenga O Idowu/  
Examiner, Art Unit 2425

/Brian T. Pendleton/  
Supervisory Patent Examiner, Art Unit 2425